

INTERNATIONAL PRELIMINARY EXAMINATION REPORT



(PCT Article 36 and Rule 70)

Applicant's or agent's file reference HWKP 2 00008 PCT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/US 03/00847	International filing date (day/month/year) 13.01.2003	Priority date (day/month/year) 15.01.2002
International Patent Classification (IPC) or both national classification and IPC B30B11/02		
Applicant HAWK PRECISION COMPONENTS GROUP, INC.		

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 6 sheets, including this cover sheet.
 - ☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 6 sheets.

- This report contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application

Date of submission of the demand 14.08.2003	Date of completion of this report 22.04.2004
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer Belibel, C Telephone No. +31 70 340-3215 

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/US 03/00847**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-15 as originally filed

Claims, Numbers

1-29 received on 11.03.2004 with letter of 09.03.2004

Drawings, Sheets

1/7-7/7 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).
3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:
- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-29
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-29
Industrial applicability (IA)	Yes: Claims	1-29
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Reference is made to the following documents:
D1: DE 40 03 016 A (REITTER ERHARDT) 8 August 1991 (1991-08-08)
D2: US-A-4 482 307 (HERREN DIETMAR ET AL) 13 November 1984 (1984-11-13) cited in the application
D3: US-A-2 509 783 (RICHARDSON LLOYD D) 30 May 1950 (1950-05-30)
D4: US-A-5 551 856 (KATAGIRI TAKESHI) 3 September 1996 (1996-09-03)
2. The document **D1** is regarded as being the closest prior art to the subject-matter of claim 1, and shows (the references in parentheses applying to this document):
A tool rig (10) suitable for the compaction of particulate materials, comprising:
a base(13);a cylinder block(12) disposed on the base (13);
first and second pistons (14,15)disposed within the cylinder block(12), the second piston (14) being at least partially disposed within the first piston (15); and
first and second supply means(42',43') for connecting an energy supply to the second piston (14) from positions within the second piston (14) to cause the second piston(14), the first supply means (42') causing the second piston (14) to move in a first direction and the second supply means (43') causing the second piston to move in a second direction opposite the first direction.
The subject-matter of claim 1 differs from this known tool rig in that the second piston moves independently from movement of the first piston
The subject-matter of claim 1 is therefore new (Article 33(2) PCT).
3. It is noted that claim **13** comprises all the features of claim 1. The subject-matter of claim **13** differs from the subject-matter of claim 1 in that "first and second supply means" are named "first and second channels"..
The subject-matter of claim 1 is new, therefore **the subject-matter of claim 13 is new (Article 33(2) PCT).**
4. It is noted that claim **23** comprises all the features of claim 1. The subject-matter of

claim **23** differs from the subject-matter of claim **1** in that the tool rig is placed in a press frame.

The subject-matter of claim **1** is new, therefore **the subject-matter of claim 23 is new** (Article 33(2) PCT).

- 5 Claims **2-12** are dependent on claim **1** and as such also meet the requirements of the PCT with respect to novelty.
- 6 Claims **14-22** are dependent on claim **13** and as such also meet the requirements of the PCT with respect to novelty.
- 7 Claims **24-29** are dependent on claim **23** and as such also meet the requirements of the PCT with respect to novelty.
- 8 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims **1, 13 and 23** does not involve an inventive step in the sense of Article 33(3) PCT.
- 8.1 The document **D1** is regarded as being the closest prior art to the subject-matter of claim **1**, and shows (the references in parentheses applying to this document):
A tool rig (10) suitable for the compaction of particulate materials, comprising:
a base(13); a cylinder block(12) disposed on the base (13);
first and second pistons (14,15) disposed within the cylinder block(12), the second piston (14) being at least partially disposed within the first piston (15); and
first and second supply means(42',43') for connecting an energy supply to the second piston (14) from positions within the second piston (14) to cause the second piston(14), the first supply means (42') causing the second piston (14) to move in a first direction and the second supply means (43') causing the second piston to move in a second direction opposite the first direction.
The subject-matter of claim **1** differs from this known tool rig in that the second piston moves independently from movement of the first piston

- 8.2 The problem to be solved by the present invention may therefore be regarded as to balance the different degrees of compression of the pistons by controlling the motion of part of the tool rig.
- 8.3 The solution proposed in claim 1 of the present application cannot be considered as involving an inventive step (Article 33(3) PCT) for the following reasons. These features have already been employed for the same purpose in a similar tool rig for the compaction of particulate materials, see document D2, page column 1, lines 50-53; column 2 lines 38-41). It would be obvious to the person skilled in the art, namely when the same result is to be achieved, to apply these features with corresponding effect to a tool rig according to document D1, thereby arriving at a tool rig according to claim 1.
Therefore the subject-matter of claim 1 does not involve an inventive step in the sense of Article 33(3) PCT.
- 8.4 It is noted that claim 13 comprises all the features of claim 1. The subject-matter of claim 13 differs from the subject-matter of claim 1 in that "first and second supply means" are named "first and second channels".
Therefore the subject-matter of claim 13 does not involve an inventive step.
- 8.5 It is noted that claim 23 comprises all the features of claim 1. The subject-matter of claim 23 differs from the subject-matter of claim 1 in that the tool rig is placed in a press frame.
Therefore the subject-matter of claim 23 does not involve an inventive step.
- 9 Dependent claims 2-12, 14-22, 24-29 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step, see documents D1, D2, D3 and D4 and the corresponding passages cited in the search report.